

Abstract of the Disclosure

5                   Optical link related wavekey information and other vendor specific  
information is distributed in a WDM network using an extension of the standard OSPF  
routing protocol. The extension makes use of a vendor attribute Link State  
Advertisement (LSA) which is a new type of opaque LSA. The vendor attribute LSAs  
include a Vendatt Link State Identifier (ID) field in the LSA header, and a Vendatt  
10   Type/Length/Value (TLV) structure. The Vendatt TLV includes a Vendatt-type field  
identifying the TLV as a Vendatt TLV, and an enterprise code field identifying the  
vendor whose equipment (node or network element) generates vendor attribute LSAs or  
is able to receive vendor attribute LSAs by the identified vendor. Vendor attribute LSAs  
of a specific vendor are designed to be ignored by nodes or network elements of other  
15   vendors.